Before the

FEDERAL COMMUNICATIONS COMMISSION Washington, D.C.

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)) WT Docket No. 02-55
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Comments of M/A -COM, Inc., a division of Tyco Electronics,

to

The Notice of Proposed Rulemaking

May 6, 2002

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Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C.

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In the Matter of)
Improving Public Safety Communications in the 800 MHz)) WT Docket No. 02-55
Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels))
Trumsportunion una Business Tool Chambels))

Comments of M/A -COM, Inc., a division of Tyco Electronics,

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The Notice of Proposed Rulemaking

To the Commission:

INTRODUCTION

M/A-COM, Inc., a division of Tyco Electronics is pleased to provide comments to the Commission's Notice of Proposed Rulemaking¹ in the above captioned public safety proceeding.

With this Notice of Proposed Rulemaking, the Commission recognizes the serious nature of the interference being experienced by public safety systems in the 800 MHz band² and the need to institute appropriate rules changes to resolve the situation. The Commission also realizes

¹ FCC 02-81 was adopted by the Commission on March 14, 2002 and released on March 15, 2002. The notice was published in the Federal Register, Vol. 67, No. 66, on April 5, 2002 at page 16351.

² For the purposes of these comments, the term 800 MHz band refers to that spectrum which is located in the 806-824 MHz block which is paired with the spectrum in the 851-869 MHz block.

that solving this serious threat to the integrity of public safety communications will not be a simple process. Likely, adequate resolution will necessitate sacrifice on the part of many 800 MHz licensees, however, good solutions can also provide numerous ancillary benefits to ALL existing 800 MHz licensees.

In May of 2001, a Tyco Intl. company purchased Com-Net Ericsson Critical Radio Systems, Inc., and integrated it into the Wireless Systems Business Unit (WSBU) of M/A-COM, Inc. M/A-COM is a leader in the high-end dispatch segment of the land mobile radio market through its OpenSky® product line. As a result of this integration, M/A-COM has become a dominant factor in the high-end dispatch segment of the land mobile radio market through its OpenSky® and EDACS® product lines.

M/A-COM has extensive experience and appreciation of the issues faced by these 800MHz Licensees because of its long term involvement in the Public Safety,
Business/Industrial-Land Transportation and SMR markets. M/A-COM has continued to maintain active participation in all relevant Commission proceedings. Most recently, M/A-COM has been actively involved with the Public Safety National Coordination Committee (NCC). The NCC, as an advisory committee under the Federal Advisory Act³, is primarily charged with advising the Commission on the rules to be promulgated for public safety use of the new 700 MHz public safety spectrum⁴, but the NCC has increasingly responded to Commission requests for advice on issues impacting all public safety frequency bands under Commission jurisdiction.

Of particular importance to this NPRM, M/A-COM has been an active participant in the Telecommunications Industry Association (TIA) Private Radio Section ad hoc committee addressing potential interference to public safety operations in the new 700 MHz public safety

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³ 5 USC Appendix, initially promulgated as Pub. L. 92-463.

spectrum. As a member of this ad hoc committee M/A-COM has assisted in the formulation of numerous inputs for the Commission,⁵ and has participated in all committee meetings with Commission staff where the potential of interference to 700 MHz public safety systems has been addressed in detail. The objective of this TIA ad hoc committee is to assist the Commission in the promulgation of appropriate rules for both the commercial and public safety segments of the 746 MHz to 806 MHz band. The hope of this ad hoc committee is to have rules that will preempt the creation of interference to 700 MHz public safety systems similar to what has been experienced in the 800 MHz band. M/A-COM contends much of the work that has been accomplished by the ad hoc committee is directly applicable to the issues being addressed in this proceeding.

M/A-COM has extensive knowledge of the practical problems associated with in-band channel-swapping as a means of resolving public safety interference concerns between licensees who employ system designs that are licensed on a site specific, frequency coordinated basis and which do not utilize dynamic frequency reassignments, and digital SMR licensees who employ system designs which are not site licensed and where frequencies are not frequency coordinated with other services and such frequencies can be dynamically reassigned on a site by site basis without frequency coordination. (For purposes of these comments, frequency coordinated systems that are licensed on a site specific basis are referred to as "coordinated" systems, hereinafter. Systems that are not subject to frequency coordination with other services and are not licensed on a site specific basis are referred to as "non-coordinated" systems hereinafter.)

Public safety agencies in some major metropolitan areas, that use M/A-COM systems, have been

⁴ Information about the NCC can be found in the Executive Summary on the NCC home page at http://wireless.fcc.gov/publicsafety/ncc/ncc_es.html. Current rules for the 700 MHz Pubic Safety band can be found in 47 CFR, Part 90, subpart R.

⁵ See Comments of the Private Radio Section of the Wireless Communications Division of the Telecommunications Industry Association filed in 99-168 on April 24, 2002 and Ex Parte filings of the Telecommunications Industry Association filed in 99-168 on March 30, 2001; August 17, 2001; November 6, 2001 and April 4, 2002.

engaged in a variety of channel swapping plans with digital SMR operators. The logistics problems associated with in-band channel swap implementations have been significant, and expensive, even though they are relatively basic public safety systems. Unfortunately, the problems experienced by these particular public safety agencies do not appear to be atypical to the practical problems that will be experienced by any licensee engaged in any in-band channel swapping scheme. The experience of these public safety licensees raises concern on the part of M/A-COM that the practical problems of effectuating in-band channel swaps between all 800 MHz licensees necessitated by some proposed 800 MHz realignment plans could be extremely expensive and formidable.

DISCUSSION

A. <u>Interference to 800 MHz Public Safety Systems is Real and the Likely Solution will Necessitate Some Type of Realignment/Reorganization of 800 MHz.</u>

The fact of interference between "coordinated" public safety systems and "non-coordinated" digital SMR systems in the current 800 MHz band has been clearly documented.⁶

The digital SMR industry and the public safety community have expended much effort trying to resolve these cases of interference. The problem is that often times identifying or replicating any incidence of interference is time-consuming and inconsistent. Identifying the problem so that fixes can be designed and implemented is often unique to a given situation and any fixes identified for one incidence may or may not be applicable to any other situation.

Considering the sheer number of interference incidences and the time that might be involved in identifying and implementing fixes for each of these incidences one must question whether a

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⁶ The Association of Public Safety Communications Officials assigned its highest priority to this problem when it created Project 39 in 2001. Project 39 has documented many interference complaints throughout the United States. Project 39 has provided voluminous reports to the Commission outlining the incidences of interference experienced.

case by case resolution would be in the public interest. An incident by incident approach would result in a continuation of potentially life threatening interference to public safety communications for an indeterminate period of time. M/A-COM believes that allowing such interference to continue for an indeterminate period of time would be dangerous. M/A-COM further believes that the Commission is correct in its belief that some sort of realignment/reorganization of the 800 MHz band will be necessary to craft a reasonable and timely solution to the public safety interference problem.

Some will argue that sufficient evidence of the problem has not yet been accumulated, nor has sufficient testing of potential solutions been accumulated to date. Thus the consideration of band realignment/reorganization is premature at this time. M/A-COM disagrees. M/A-COM with its first hand knowledge and experience asserts that any and all solutions shall include realignment/reorganization plans to adequately resolve the problems. Certainly the ultimate solution may include measures more than realignment/reorganization, but M/A-COM does not envision any adequate solution that will not include realignment/reorganization in some way, shape or form. Thus, M/A-COM believes it would be best for the Commission to evaluate all realignment/reorganization proposals at this time; determine which realignment/reorganization proposal best satisfies the desired characteristics of a realignment/reorganization; and begin to implement the selected 800 MHz realignment/reorganization plan as soon as possible.

The Commission has also discussed that additional palliative measures could also be implemented as a part of the resolution to the interference problem. M/A-COM agrees with the Commission in describing these measures as "additional measures" because we do not believe that these measures, standing alone, will sufficiently and satisfactorily resolve the problem.

M/A-COM will not specifically comment on these additional palliative measures and will join in

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⁷ See paragraphs 73 through 79 of the NPRM.

the comments that are being submitted by the Private Radio Section of the Telecommunications
Industry Association. However, M/A-COM strongly encourages the Commission to consider
these additional palliative measures for appropriate application consistent with whatever 800
MHz realignment/reorganization is implemented. M/A-COM strongly encourages the
Commission to implement a realignment/reorganization plan as quickly as feasible, regardless of
the appropriate timetable for implementation of these "additional measures."

As part of the realignment/reorganization decision the FCC will need to determine if the realignment/reorganization will include all existing licensees remaining in the 800 MHz band, as envisioned in the National Association of Manufacturers (NAM) plan and the Commission's alternative that were outlined in the Notice of Proposed Rulemaking. Alternatively the Commission may decide that some of the current 800 MHz licensees need to relocate outside of the 800 MHz band. Regardless, of whether some or all licensees stay in the 800 MHz band, the same principles should guide the Commission in the selection of a realignment/reorganization plan.

B. General Principles to Guide the Commission in selecting among 800 MHz Realignment/Reorganization proposals

The principles that the Commission should utilize for determining which realignment/reorganization proposal will best satisfy the public interest are straight forward.

Application of these principles is where things get difficult.

First and foremost the realignment/reorganization proposal must have the ability to minimize, if not eliminate, the interference problem which is currently being experienced. If the

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⁸ The NAM plan is discussed in the NPRM at paragraph 21 and following. The Commission alternative is discussed in the NPRM at paragraph 26 and following.

⁹ See the Nextel proposal discussed in the NPRM at paragraph s 23 and following.

proposal does not sufficiently resolve the interference problem, then it should be eliminated from further consideration. The best indication of a proposal's ability to resolve the problem, is the degree of separation provided between "coordinated" public safety systems and "non-coordinated" digital SMR systems. The more separation between the public safety systems and the "non-coordinated" digital SMR systems, the better the proposal will be at resolving the interference problem. Additionally when considering each proposal, the Commission should also consider the resulting separation provided between the "coordinated" public safety systems and the cellular Block A/Block B systems located immediately adjacent to the current NPSPAC channels. The idea is to select a plan that not only maximizes the separation between the "coordinated" public safety systems and the "non-coordinated" digital SMR systems within the 800 MHz band, but also maximizes the separation between the "coordinated" public safety systems and the Cellular Block A/Block B systems.

The second principle that must guide the Commission in selecting between realignment/relocation proposals, is a comprehensive assessment of the degree of impact imposed on existing licensees to effectuate the particular realignment/reorganization.

Unfortunately, the impact to existing licensees, associated with any of the proposals will not be inconsequential. Surely the impact on existing licensees will vary from proposal to proposal, but in no case do we expect the impact to be egregious or cause irreparable financial hardship.

Notwithstanding the complexities of a realignment/relocation proposal, however, the elimination of the destructive interference currently being experienced by 800 MHz public safety systems demands that something be done, as quickly as feasible.

The impact that is uppermost in all licensees' minds is the cost associated with any of the realignment/reorganization proposals, and who will pay such costs. The Commission must choose a plan that generates the lowest reasonable cost and imposes the burden of payment in the

most equitable manner. The Commission must also develop a method of collecting payment that recognizes the fact some of those responsible for payment of the cost may not exist in the future. Ideally, the Commission can fashion a plan that only imposes costs on those responsible for correcting the interference, and which assures that payment from those responsible is, in fact, obtained. In evaluating the impact associated with each proposal, the Commission must look carefully at all potential impacts associated with a given proposal and then carefully weigh the overall impact. Simply saying that one proposal costs more than another proposal or one proposal requires more licensees to relocate either within the band or outside of the 800 MHz band is insufficient. The Commission must weigh all aspects of a proposal's impact and then make a Solomon-like decision concerning which proposal best satisfies the public interest as a whole, and is thus most feasible for implementation.

The Commission has outlined additional goals that can also be considered in this proceeding. These goals include an opportunity to determine the adequacy of public safety spectrum, and an opportunity to improve the spectrum efficiency of 800 MHz systems in general. While these goals are meritorious, the Commission must not stray from the primary purpose of this proceeding to resolve the interference problem being experienced by 800 MHz public safety systems. M/A-COM believes that the Commission must first decide which realignment/reorganization proposal best satisfies the public interest without considering these additional goals. Then and only then should the Commission consider how the selected proposal may address these additional goals, but only to the extent they can be addressed without additionally impacting other 800 MHz licensees.

M/A-COM cautions the Commission to be extremely wary of any claims that a proposal, which keeps all current licensees in the realigned/reorganized 800 MHz band, results in one class of licensee obtaining a bigger share of the 800 MHz spectrum. If true, such claims mean that

some other licensee is getting a smaller share of 800 MHz spectrum, which clearly skews the "impact on licensee's" determination that the Commission must make. More importantly, these claims often fail to recognize that many current 800 MHz licensees operate in portions of the 800 MHz band which are not directly allocated for a particular licensee's class of radio service. The best example of this phenomenon is exhibited in the current SMR Blocks, D, DD, E, EE, F & FF, which originally were the General Category channels. Many general category licensees, who were not required to relocate continue to operate in this portion of the 800 MHz spectrum even though they are not SMR licensees. Failure to include the spectrum used by these "holdover" general category licensees in any calculation of the amount of spectrum used by a given class of licensees will result in an answer that is not only incorrect, but also misleading.

M/A-COM has reviewed the NPRM in detail and coupled with our experience, would like to offer the following realignment/reorganization proposals for consideration. One M/A-COM proposal keeps all current licensees in the 800 MHz band, and the second proposal is predicated upon the fact that some class or classes of existing 800 MHz licensees would move to other frequency bands.

M/A-COM recognizes that each of its proposals satisfies the guiding principles to varying degrees, however we believe that our proposals better satisfy the guiding principles that we have previously outlined herein, in toto.

C. Realignment/Reorganization Proposal for 800 MHz with all current licensees remaining in the 800 MHz band

806 MHz	807.75	810.75	813.25	817.00	819.00 824	MHz
70 chs Public safety (former nor NPSPAC 800 PS)		100 channels - Business 8 ⊮LT	150 channels - SMR (former 800 MHz Auction Blocks D, DD, E, EE, F, FF)	80 channels - SMR (former 800 MHz Auction Blocks G-V)	200 channels - SMR (former 800 MHz Auction Bloc	cks

NOTE: Frequencies shown are Mobile TX. For Base TX add 45 MHz

M/A-COM believes that its proposal which keeps all current 800 MHz licensees in the 800 MHz band will be similar to many other proposals that have been or will be made as part of this proceeding. The principal distinguishing factor of the M/A-COM proposal is that it does not attempt to adjust the amount of 800 MHz spectrum that is currently allocated to any one type of licensee. As noted previously, M/A-COM believes that the primary goal of this proceeding is to resolve the interference problem. This M/A-COM proposal is designed to best solve the interference problem without compromising that resolution by attempting to adjust stakeholds in 800 MHz among the different classes of licensees. However, as discussed hereinafter this proposal does provide the Commission with opportunities to increase the capacity within certain stakeholder blocks of spectrum.

This M/A-COM proposal, on its face, provides maximum separation between the "coordinated" public safety systems and the "non-coordinated" digital SMR systems, if all current licensees remain within the band. This plan also recognizes that many "coordinated" systems continue to operate in the former general category channels and places that SMR block in the closest proximity to the "coordinated" system blocks.

With the exception of the block of 70 Public Safety channels in the 806 MHz to 807.750 MHz band and the 100 Business/Industrial-Land Transportation channels in the 810.750 MHz to

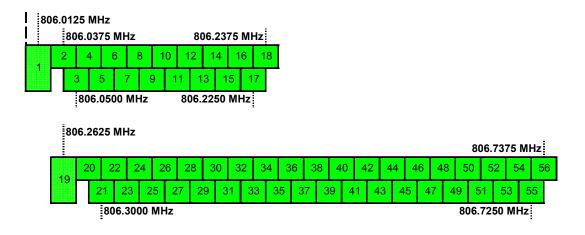
813.250 MHz band shown above, this M/A-COM proposal relocates portions of the spectrum in block fashion. This is to ease the relocation that will be necessary, by eliminating complex frequency coordination problems that would be incurred if set "one for one" frequency exchange was not utilized. In the 70 channel Public Safety block shown above, while some frequency coordination will most likely be necessary, adopting a plan that exchanges the lowest frequency channel in the current 800 MHz non-NPSPAC public safety allocation for the lowest channel in the new 70 channel public safety allocation, and so on through all 70 public safety channels, should minimize the coordination problems. A similar approach should also be employed in the 100 channel Business/Industrial-Land Transportation block to minimize coordination problems.

As part of this proposal, the Commission should also establish a rule that "non-coordinated" system designs should not be allowed in the public safety and business/industrial-land transportation blocks. Additionally, recognizing that many "coordinated" systems continue to operate on the former general category channels, the Commission should also consider a rule that would move these licensees to the lower ends of the relocated SMR Blocks D, DD, E, EE, F and FF to provide some separation, at least on one side, from the "non-coordinated" systems which may be operating in the relocated spectrum.

This proposal does not adjust the amount of 800 MHz spectrum allocated to any one class of licensee. However, the consolidation of the 70 non-NPSPAC public safety channels into one contiguous block provides the Commission with an opportunity to increase the capacity of this spectrum by adjusting the channel spacing. Furthermore, if the Commission decides to change the channel spacing within this relocated 70 channel public safety block, the Commission could also decide to designate additional mutual aid channels that would be compatible with the 5 mutual aid channels contained within the relocated NPSPAC block. The channel spacing in the

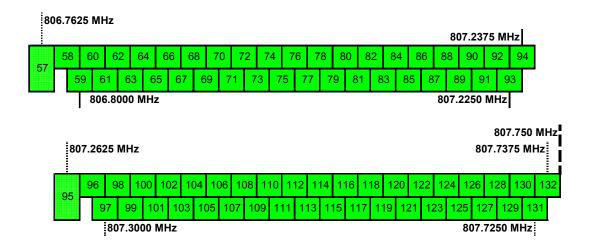
relocated 70 channel public safety block could be changed to 12.5 kHz centers such that the 70 channel block would be structured similar to the NPSPAC block, i.e. 25 kHz operating bandwidth on 12.5 kHz channel centers. Extending the mutual aid channel spacing down into the reorganized 70 channel public safety block would mean that 4 additional mutual aid channels and 58 additional working channels could be realized.

Reorganization of the 70 channel public safety block as discussed above would complicate the frequency coordination issues associated with the realignment/reorganization plan, and the impact of "mask" issues¹¹ on existing equipment would need to be addressed. However, with the understanding that these coordination and "mask" issues can be reasonably resolved, the concept is worthy of consideration. A potential layout of the 70 channel public safety block with the revised channel spacing and the additional mutual aid channels is shown below:



¹⁰ This would be similar to the prohibition of cellular system designs in the 700 MHz "Guard Band" spectrum. See 47 C.F.R. 27.2(b).

¹¹ See 47 C.F.R. 90.210

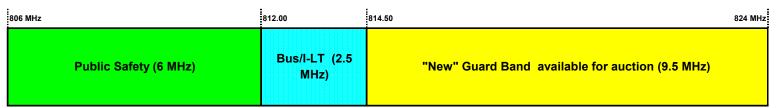


While this M/A-COM proposal does not specifically suggest the Commission also consider changes to the channel spacing in the relocated business/industrial-land transportation block, it is something the Commission could consider. Altering the channel spacing in this relocated business/industrial-land transportation block could realize up to 99 additional channels of spectrum capacity. However, since the current business/industrial-land transportation spectrum has not dealt with 25 kHz operating bandwidths on 12.5 kHz channel centers and the revised "mask" limit associated with such channel spacing, as has the public safety community, the problems associated with re-channelling the business/industrial-land transportation block as part of the realignment/reorganization may be significantly greater.

A major factor in this proposal as well as all proposals, concerns the feasibility of implementing the relocation. As with all plans that retain all of the current licensees in the realignment proposal, the logistics of effectuating the relocation will be daunting. As noted previously, the M/A-COM experience with relocation has not been easy, and we anticipate that effectuating a wholesale swap of frequencies may be a challenging and expensive experience. However, we believe that the Commission will need to mandate that all current licensees must relocate to their new assigned block of spectrum by a date certain. Furthermore, we believe that the date certain must be in the reasonably near future, certainly not more than five years away.

Since it does not appear that "green" spectrum will be available to temporarily host relocating licensees, it will be incumbent upon the "non-coordinated" system operators to fashion relocation plans on a frequency by frequency basis such that all licensees can maintain almost normal operations during the transition, or the "non-coordinated" system operators must be willing to shut down portions or all of their systems to clear spectrum for the "coordinated" system relocation. As a baseline, "coordinated" public safety systems as well as many other "coordinated" business/industrial-land systems can not tolerate any significant disruption in services. Furthermore, the relocation plans must not require more than one retuning or relocation step for the "coordinated" systems.

D. <u>Realignment/Reorganization Proposal for 800 MHz with some current licensees</u> relocating outside the 800 MHz band



NOTE: Frequencies shown are Mobile TX. For Base TX add 45 MHz

The second M/A-COM proposal assumes that some current 800 MHz licensees are relocated out of the 800 MHz band to other suitable spectrum. This proposal is similar to the proposal made in the Nextel "white paper." However, our proposal differs because instead of relocating the business/industrial-land transportation licensees out of the band, it assumes that "non-coordinated" digital SMR licensees are relocated out of the band.

The Commission has indicated a willingness to consider relocating some licensees out of the band, ¹² and M/A-COM believes that if this is done it is best to limit the resultant realigned/reorganized band to "coordinated" systems. Realigning the band including removal of some current licensees is sensible provided adequate replacement spectrum is identified.

However, to achieve maximum resolution of the interference problem, M/A-COM believes that it would be unwise to retain a mixture of "coordinated" and "non-coordinated" systems in the realigned band.

The most attractive feature of this proposal, is the fact that once the "non-coordinated" systems are relocated out of the 800 MHz band, there really is no necessity to mandate relocation of the remaining "coordinated" systems to their appropriate block of spectrum on a short-term basis. These "coordinated" systems could remain operating on their currently assigned frequencies for a substantial period of time, maybe as long as 10 or 15 years before relocation should be required. Within the 10 to 15 year period it is likely that these "coordinated" systems would likely undergo technology or system upgrades regardless of any 800 MHz realignment/reorganization. Mandating relocation to their assigned portion of the realigned/reorganized spectrum at the time of a future system/technology upgrade would incur little or no additional expense. In effect, the Commission could eliminate the "unfunded mandate" accusation that likely will accompany many of the realignment/reorganization proposals, which could be adopted. This approach could eliminate any confusion associated with whether the costs incurred in relocating "coordinated" systems are in fact incurred as the result of the relocation or whether such costs are really incurred because of system upgrades.

Another positive aspect of this proposal is the fact that removal of the "non-coordinated" systems from the current 800 MHz spectrum would free up as much as 21.5 MHz (10.75 MHz paired) of spectrum. This opens up a range of possibilities for the Commission to consider.

Assuming it is justified, the Commission can consider allocating some portion of this "freed" spectrum to public safety. The plan shown above arbitrarily indicates that an additional 2.5 MHz (1.25 MHz paired) of spectrum is newly allocated to the public safety community, but this

¹² See the NPRM at paragraphs 50 and following

number could be more or less as the Commission deems appropriate. The Commission could also allocate additional spectrum to the business/industrial-land transportation community if it is deemed appropriate.

Since it is unlikely that the Commission would allocate all of the spectrum to either the public safety and/or the business/industrial-land transportation communities, the balance of the spectrum could be used as a new "guard band." This new "guard band" could be auctioned to Guard Band Managers and the proceeds could be placed in trust to use as a tool to motivate "coordinated" licensees to relocate to their newly assigned portions of the realigned/reorganized 800 MHz spectrum. Alternatively, rather than creating a trust fund from the auction proceeds, the Commission could decide to allow the successful bidders to use "market forces" to motivate "coordinated" licensees to relocate to their newly assigned portions of the realigned/reorganized 800 MHz spectrum on an expedited basis.

M/A-COM believes that a realignment/reorganization plan similar to this second proposal would have benefits for all impacted by the current interference problems. Clearly, the current "coordinated" systems would have their interference problems resolved at essentially no cost to them. These current licensee classes might also benefit by the potential for additional spectrum becoming available. The Commission would benefit by achieving its goal of resolving the interference problem, while at the same time avoiding an "unfunded mandate" challenge from the public safety and business/industrial-land transportation communities. The "non-coordinated" digital SMR system operators would benefit because the interference problem would be solved, relieving them of any potential responsibility. These operators would not be faced with resolving the question of whether others' costs were in fact solely related to a mandatory relocation or whether some element of the claimed costs were truly related to system upgrades.

E. General Issues

The Commission has also asked in this proceeding whether it should attempt to satisfy other objectives as part of the reallocation/reorganization plan that may be adopted. M/A-COM applauds the Commission for wanting to achieve as much as possible in this proceeding. However, M/A-COM also cautions the Commission that whether satisfying any of these other objectives can even be attempted is clearly dependent on whether all current licensees remain in the current 800 MHz band.

If the Commission determines to adopt a realignment/reorganization plan that keeps all current licensees in the realigned/reorganized 800 MHz band, then M/A-COM does not think it is prudent to mandate achievement of these other objectives, e.g. improved spectrum efficiency in the 800 MHz band. The underlying premise of keeping all current licensees in the realigned/reorganized band appears to be a desire to minimize the impact to existing equipment while at the same time resolving the interference problem. Adding additional requirements, i.e. beyond interference resolution, seems to be contrary to the concept of minimizing equipment impact. Furthermore, such requirements would also cloud the issue of financial responsibility because they would seemingly go beyond the idea of simply resolving the interference problem. If, however, the Commission should adopt a realignment/reorganization plan similar to M/A-COM's second proposal, achievement of these other objectives could be an integral part. Since nobody is mandated to relocate to their newly allocated portion of the realigned/reorganized 800 MHz spectrum, until such time as that licensee would normally conduct a system or technology upgrade, mandating additional requirements to be part of such system or technology upgrade adds little or no cost. The important part is that these additional requirements are known about and planned for well in advance and thus present little or no additional burden.

SUMMARY

With this proceeding the Commission has commenced to resolve what is a very significant problem in the current 800 MHz band. While the challenges associated with fashioning an appropriate resolution may be great, M/A-COM believes that reasonable resolutions that satisfy the public interest are possible.

In our comments, M/A-COM is proposing two realignment/reorganization plans that we believe will resolve the 800 MHz interference problems. One plan assumes that all current 800 MHz licensees remain in the band even though the organization of the band is substantially changed. The other M/A-COM proposal assumes that one class of current 800 MHz licensees, namely those that operate "non-coordinated" digital SMR systems is relocated to other suitable spectrum, while at the same time reallocating the 800 MHz band among the remaining licensees.

To be sure, both M/A-COM proposals will require sacrifice on the part of all current 800 MHz licensees. This is a trait that M/A-COM believes will be true for each and every proposal that has been made to the Commission or will be made to the Commission during the pendency of this proceeding. However, there appear to be numerous additional benefits and opportunities associated with M/A-COM's proposals. M/A-COM continues to offer its sincere efforts and cooperation to the Commission to help resolve a very serious issue confronting the Public Safety, Business/Industrial-Land Transportation and SMR Licensees.

Respectfully Submitted,

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